

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

Paper No. 22

UNITED STATES PATENT AND TRADEMARK OFFICE

**BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES**

Ex parte JAMES P. WOLFE, EUGENE R. WOLFE
and RYAN J. WOLFE

Appeal No. 2004-0658
Application No. 09/419,579

ON BRIEF

Before FRANKFORT, McQUADE, and NASE, Administrative Patent Judges.
NASE, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 1 to 13, which are all of the claims pending in this application.

We AFFIRM-IN-PART.

BACKGROUND

The appellants' invention relates to an audible warning signal for roadway work zones (specification, p. 1). A copy of the claims under appeal is set forth in the appendix to the appellants' brief.¹

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

Sullivan	4,265,194	May 5, 1981
Cameron	6,035,567	Mar. 14, 2000

Claims 1 and 6 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Cameron.

Claims 2 to 5 and 7 to 13 stand rejected under 35 U.S.C. § 103 as being unpatentable over Cameron in view of Sullivan.

Rather than reiterate the conflicting viewpoints advanced by the examiner and the appellants regarding the above-noted rejections, we make reference to the answer (Paper No. 20, mailed July 29, 2003) for the examiner's complete reasoning in support

¹ In claim 7, the phrase "said audible warning device" should be changed to --said audible warning means-- for proper antecedent basis.

of the rejections, and to the brief (Paper No. 19, filed May 14, 2003) for the appellants' arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to the appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by the appellants and the examiner. As a consequence of our review, we make the determinations which follow.

The anticipation rejection

We sustain the rejection of claims 1 and 6 under 35 U.S.C. § 102(b).

A claim is anticipated only if each and every element as set forth in the claim is found, either expressly or inherently described, in a single prior art reference. Verdegaal Bros. Inc. v. Union Oil Co., 814 F.2d 628, 631, 2 USPQ2d 1051, 1053 (Fed. Cir.), cert. denied, 484 U.S. 827 (1987). The inquiry as to whether a reference anticipates a claim must focus on what subject matter is encompassed by the claim and what subject matter is described by the reference. As set forth by the court in Kalman v. Kimberly-Clark Corp., 713 F.2d 760, 772, 218 USPQ 781, 789 (Fed. Cir. 1983), cert. denied, 465 U.S. 1026 (1984), it is only necessary for the claims to "'read on' something

disclosed in the reference, i.e., all limitations of the claim are found in the reference, or 'fully met' by it."

Claims 1 and 6 read as follows:

1. A warning sign, comprising:
 - (a) a manually rotatable, vertical staff having a manually graspable, vertical portion:
 - (b) a display portion mounted on said staff to impart visual warning information to an observer; and
 - (c) manually selectively activatable audible warning means disposed adjacent said manually graspable, vertical portion, such that said manually selectively activatable, manual audible warning means can be activated by a person holding said manually graspable, vertical portion.
6. An audible warning device for use with a visual warning sign, comprising:
 - (a) a first vertical segment to comprise part of a manually rotatable staff, said first vertical segment having a manually graspable, vertical portion, to which manually rotatable staff a visible warning portion is attached; and
 - (b) selectively activatable audible warning means disposed adjacent said manually graspable, vertical portion, such that said manually^[2] selectively activatable, manual audible warning means can be activated by a person holding said manually graspable, vertical portion.

Cameron's invention relates generally to portable traffic warning and control signs for use by road crews, policemen, firemen, crossing guards, and the like. Figures 1A, 1B, 2A and 3 to 6 show a sign assembly having a visual/audible warning assembly in accordance with a first embodiment of Cameron's invention. Figure 2B shows the

² Either this instance of manually should be deleted or manually should be inserted in front of selectively activatable audible warning means for proper antecedent basis.

upper part of a sign assembly having a visual/audible warning assembly in accordance with a second embodiment of Cameron's invention. Figure 7 depicts a hand-held warning sign assembly in accordance with another embodiment of Cameron's invention. Cameron teaches that the combination of a light and a horn in the assembly provides strong visual and audible signals for drawing a person's attention to the written warning which is displayed on the panel section of the sign.

The hazard warning sign assembly 10 shown in Figure 1A is made up of (1) a display panel section 12, (2) a combined warning light and audible signal section 14, (3) a power/control section 16, and (4) a telescoping pole section 18. The panel assembly 12 includes a sign plate 20 having first and second display surfaces 22a, 22b (22b being shown in Figure 1B) in which appropriate warnings may be painted or otherwise displayed. For example, in the embodiment which is illustrated in Figures 1A-1B, which is adapted mainly for roadside traffic control use, the first side 22a displays the word "STOP" while the opposite side 22b displays the word "SLOW." A hollow support rod 26 extends vertically across sign plate 20, with the combination warning light/audible warning assembly 14 being mounted on the upper end of this and the power/control assembly being attached to its lower end. The hollow support rod 26 provides a conduit for wire leads supplying power from the power/control assembly 16 to the light/horn assembly 14.

Cameron's power/control assembly 16 is provided with an elongate tubular housing 28 for holding one or more batteries which supply electrical power to the light/horn assembly 14. First and second finger actuated control buttons 30, 32 are provided so as to enable the operator to selectively actuate the horn and flashing light individually or simultaneously. Cameron's telescoping pole assembly 18 comprises an extensible tubular support section 34 having a non-skid base 36 which rests on the ground.

As shown in Figure 2A of Cameron, the audible/visible warning assembly 14 includes a housing 38 having a base ring 40 which threads onto or otherwise mounts to the upper end of the tubular support rod 26. The upper portion of the housing provides a base connection 42 for a warning light 44 having a domed plastic enclosure. The audible warning signal is provided by a powerful horn unit 46 which is mounted in housing 38, below the light 44. Preferably, the horn unit is at least bi-directional, i.e., it faces outwardly from both sides of the side plate, and in some embodiments the horn unit may be omni-directional. Cameron teaches (column 5, lines 18-23) that:

Although the placement of the visual and audible signals at the top of the side assembly as shown in FIG. 2A has the advantage of increasing both visibility of the light and the effective range of the horn unit, it will be understood that numerous other placements may be used for these components.

Figure 2B shows a second embodiment of the invention in which each display surface of the sign plate (only the first display surface 22a being shown in FIG. 2B) is provided with a plurality of spaced apart flashing light units. The position of the horn unit 52 may be at any suitable location in this embodiment, with a position near the upper part of the sign being preferred again for achieving maximum projection.

Figure 7 shows a hand-held sign assembly 140 which lacks the telescoping pole assembly described above. The hand-held sign assembly 140 includes power/control assembly 142 which is substantially similar to the corresponding assembly 16 described above, having finger operated control buttons 30, 32. The power/control assembly 142, which is sized to be conveniently held in one hand, is connected to a combined visual/audible warning assembly 144 by means of a male/female coupler pair 146. In this embodiment, however, the visual/audible warning assembly 144 is preferably positioned at the base of the sign plate 20 so as to provide the assembly with better balance for hand-held use. The light unit includes a single strobe light 150 which illuminates both sides of the sign, through an opening in plate 20. On the "STOP" side, the light unit is provided with a red lens 152, while the opposite side of the sign plate (having the "SLOW" legend) has an amber lens. The horn unit 154, in turn, is substantially similar to that described above with reference to Figure 2A, and is

configured to project the audible warning signal outwardly from both sides of the sign assembly.

The appellants argue (brief, pp. 2-3) that claims 1 and 6 require the audible warning device (i.e., the selectively activatable audible warning means) to be "adjacent" the manually graspable, vertical portion of the staff, not on top of the staff as is Cameron's audible warning signal device 14.

In our view, the limitation in claims 1 and 6 that the selectively activatable audible warning means be "adjacent" the manually graspable, vertical portion of the staff is readable on Cameron as follows. In the embodiment of Figure 1A of Cameron, the claimed selectively activatable audible warning means is readable on Cameron's audible warning signal device 14, the actuating control 30 or 32 and the connecting wires running in the hollow support rod 26. Clearly, as shown in Figure 1A, Cameron's actuating control 30 or 32 that operates the audible warning of signal device 14 is "adjacent" the manually graspable, vertical portion of the staff (Cameron's tubular housing 28). In the embodiment of Figure 7 of Cameron, the claimed selectively activatable audible warning means is readable on Cameron's horn unit 154 and the actuating control 30 or 32. Clearly, as shown in Figure 7, both Cameron's horn unit 154 and the actuating control 30 or 32 that operates the horn unit 154 are "adjacent" the

manually graspable, vertical portion of the staff (Cameron's power control assembly 142).

For the reasons set forth above, the decision of the examiner to reject claims 1 and 6 under 35 U.S.C. § 102(b) is affirmed.

The obviousness rejection

We sustain the rejection of claims 2, 3, 7 and 8 under 35 U.S.C. § 103 but not the rejection of claims 4, 5 and 9 to 13.

The test for obviousness is what the combined teachings of the references would have suggested to one of ordinary skill in the art. See In re Young, 927 F.2d 588, 591, 18 USPQ2d 1089, 1091 (Fed. Cir. 1991) and In re Keller, 642 F.2d 413, 425, 208 USPQ 871, 881 (CCPA 1981). Moreover, in evaluating such references it is proper to take into account not only the specific teachings of the references but also the inferences which one skilled in the art would reasonably be expected to draw therefrom. In re Preda, 401 F.2d 825, 826, 159 USPQ 342, 344 (CCPA 1968).

Sullivan teaches the use of a fire alarm heat sensor. The heat sensor is provided having a support member, an actuating member mounted pivotally therewith

by a spring operatively engaging, in tensioned condition, a portion of the support member and the actuating member, and a member fabricated of two separable portions each bound to the other by fusible material which when fused at a predetermined temperature permits the two separable portions to be released, thus activating the heat sensor. Sullivan further teaches that the heat sensor operates in conjunction with a canister of compressed gas and a horn which are operatively associated with the heat sensor to sound an alarm when the heat sensor is activated. As shown in Figure 1, the heat sensor 1 includes compressed gas canister 10, horn assembly 20 and valve actuation means 50.

Claims 2, 3, 7 and 8

With regard to claims 2, 3, 7 and 8, the appellants argue (brief, pp. 3-5) that the subject matter of these claims is not suggested by the combined teachings of the applied prior art. Specifically, the appellants argue that there is no teaching, suggestion or motivation in the applied prior art to have modified Cameron's warning sign to have the warning/signaling device disposed within a vertical segment of the staff. We do not agree.

In our view, Cameron discloses in Figure 7 that the horn unit 154 is disposed within a vertical segment of the staff. Additionally, it is our conclusion that the teachings

of Sullivan would have made it obvious at the time the invention was made to a person of ordinary skill in the art to have replaced Cameron's horn unit 154 within the staff with a compressed gas horn unit within the staff since the prior art teaches these two types of horn units are known alternatives. In this regard, it must be borne in mind that where two known alternatives are interchangeable for their desired function, an express suggestion of the desirability of the substitution of one for the other is not needed to render such substitution obvious. See In re Fout, 675 F.2d 297, 301, 213 USPQ 532, 536 (CCPA 1982); In re Siebentritt, 372 F.2d 566, 568, 152 USPQ 618, 619 (CCPA 1967).

For the reasons set forth above, the decision of the examiner to reject claims 2, 3, 7 and 8 under 35 U.S.C. § 103 is affirmed.

Claims 4, 5 and 9 to 13

With regard to claims 4, 5 and 9 to 13, we find ourselves in agreement with the appellants (brief, pp. 3-5) that the subject matter of these claims is not suggested by the combined teachings of the applied prior art. Specifically, there is no teaching, suggestion or motivation in the applied prior art to have modified Cameron's warning sign to have a compressed gas signaling device disposed within the manually graspable portion of the staff to include either (1) activation means manually accessible

through an opening defined in the manually graspable portion as recited in claims 4, 5 and 9 to 13, or (2) a flared horn portion adjacent another opening defined in the manually graspable portion as recited in claims 4, 5 and 9, 10 and 12.

For the reasons set forth above, the decision of the examiner to reject claims 4, 5 and 9 to 13 under 35 U.S.C. § 103 is reversed.

CONCLUSION

To summarize, the decision of the examiner to reject claims 1 and 6 under 35 U.S.C. § 102(b) is affirmed and the decision of the examiner to reject claims 2 to 5 and 7 to 13 under 35 U.S.C. § 103 is affirmed with respect to claims 2, 3, 7 and 8 and reversed with respect to claims 4, 5 and 9 to 13.

No time period for taking any subsequent action in connection with this appeal
may be extended under 37 CFR § 1.136(a).

AFFIRMED-IN-PART

CHARLES E. FRANKFORT
Administrative Patent Judge

JOHN P. McQUADE
Administrative Patent Judge

JEFFREY V. NASE
Administrative Patent Judge

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Appeal No. 2004-0658
Application No. 09/419,579

Page 14

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